# D. C. Hayes Associates, Inc. MICROCOMPUTER PRODUCTS

## MICROMODEM II

A data communications system for the Apple II\* personal computer!





### **General Description**

The Micromodem II is a complete data communications system for your Apple II\* personal computer system combining functions which formerly required a modem, an automatic calling unit, and serial and parallel interfaces. The result is a sophisticated computer-to-computer or terminal-to-computer modem for use in personal and small business systems.

The Micromodem II provides all the capabilities of a serial interface card and an acoustic coupler, with the addition of programmable automatic dialing and answer. On-board ROM firmware provides for remote console, terminal mode, and simplified implementation of more sophisticated applications with BASIC programs.

The Micromodem II comes with the Microcoupler™, an exclusive new device that allows you to connect your Apple Il directly to a modular jack provided by your local telephone company.

#### **Features**

- Direct-connect Microcoupler. This FCC-registered device provides direct access into your local telephone system, with none of the losses or distortions associated with acoustic couplers and without a telephone company supplied data access arrangement.
- Auto-Answer/Auto-Call. The Micromodem II can automatically answer the phone and receive input; it can also dial a number automatically, either from the keyboard or from a BASIC program, and effect the transfer of data.
- High-performance 110 or 300 baud Bell 103-compatible modem. Supports originate and answer modes.
- Interactive programming and distributed computing capabilities between your Apple II and another Apple II, or a terminal, another microcomputer, minicomputer, or a large time-sharing computer anywhere in North America, over regular telephone lines.

<sup>\*\*</sup>Micromodem II and Microcoupler are trademarks of D. C. Hayes Associates, Inc.

# Micromodem IITM Functional Block Diagram PARALLEL TO SERIAL CONVERSION SERIAL SERIAL SERIAL

PARALLEL

CONVERSION

DIGITAL

DEMOD

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microcoupler

## **Applications of the Micromodem II/Apple II**

- Convenient data communications between home and office.
- Automatic data collection from remote terminals.
- Send programs, letters, and other data over the telephone
- Intelligent terminal.
- · Access to remote, on-line data bases.
- Remote software maintenance and customer support.
- Stock Market portfolio analysis.

### Installing the Micromodem II in your Apple II

RECEIVE

FILTER

TELEPHONE

The Micromodem II is easy to install. Simply insert the Micromodem Il circuit board into any Apple expansion slot (except slot O). Then plug one end of the ribbon cable into the card and the other end into the Microcoupler™. Plug one end of the modular telephone cable into the Microcoupler and the other end into a standard modular telephone jack. Just notify the telephone company that you are using an FCCregistered device. There is no extra monthly charge for this connection. The Micromodem II is now ready to use!

ROM

FIRMWARE

(PROGRAMS)

CONTROLS



Specifications	
Data Format	Serial, binary, asynchronous 7 or 8 data bits, 1- or 2-stop bits odd, even, or no parity.
Lower case characters	Can be optionally converted to upper case, or can be passed through unmodified.
Firmware	1024 byte read only memory (ROM)
Power consumption	1.5 W Typical
Card size	7" x 3" including connector fingers.
Microcoupler size	5-½" x 3-¼" x 1-¾".
Modem compatibility	Bell System 103-compatible originate or answer mode, dial pulse dialing and auto-answer50 dBm receive sensitivity -10 dBm transmit level 110 or 300 baud data rate
FCC registration	FCC Registration No. BI986H-62226-PC-E. Ringer equivalence 0.4B. Connects with modular jacks RJ11W or RJ11C.

### Ordering Information

The Micromodem II is supplied with:

- Modem Interface card
- Firmware in ROM
- Microcoupler
- Connector Cables
- Owner's Manual

Ask for it at your local computer store.

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